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GENESEE FARMER.

SATURDAY, APRIL 15, 1837.

Ploughing.

The difference in the amount of products between land that has been thoroughly tilled, and that which has only undergone an apology for tillage, must have at times arrested the attention of the most careless farmer. Land adequately manured, deeply and finely ploughed, and properly seeded, can alone be relied on as a source of profit to the cultivator; yet how few are the farms around us, where these desirable things are carried out to their full and proper extent. The earth is barely skimmed in ploughing—what sailors call a wide birth is given to the stones and stumps—the seed is put on unequally and sparingly, and then the farmer affects to wonder his crop is no better. We do not conduct our business as we know it should be done; we undertake more than can be performed well; our manure is not applied to the proper crops, and in these various ways nearly one half our labor may be said to be lost.

The garden is that part of the farm where the effects of thorough ploughing and manuring are seen in the increased product and profit for labor bestowed; though our gardens are too often only the shadows of what they might be, and should be, if cultivated properly. The farmer ploughs his garden deeper and finer than the rest of his premises, and manures it better, scarcely seeming to remember that field crops require the same depth for the free expansion of their roots, and the same richness of soil to promote their rapid growth, that is required by the vegetables of the garden. Let a farmer examine the extent and depth to which the roots of corn in a loose and favorable soil will spread, and he will cease to wonder at the failure of a crop where the subsoil at the depth of three or four inches has never been stirred by the plough, and over the hard-pan of which the tender fibers of the roots vainly wander in search of proper nutriment, and as fruitlessly strive to penetrate.

In loamy or sandy soils, the roots of trees have been found to penetrate to the depth of ten or twelve feet; and the roots of the Canada thistle have been traced six or seven feet below the surface. Wheat, if planted in a mellow rich soil, will strike its roots three feet downwards, and elongate much further horizontally. The roots of oats have been discovered at eighteen inches from the stem; and the long thread-like roots of grass extend still farther. The roots of the onion are so white, that in a black mold they can be readily traced, and in a trenched or spaded soil they have been followed to the depth of two feet. The potatoe throws out roots to the distance of fifteen or twenty inches; and the tap rooted plants, turneps, beets, carrots, &c., independent of the perpendicular root, spread their fibers to a distance which equals if it does not exceed the potatoe. It is perfectly absurd to expect to succeed with roots of this class, unless the ground is so mellow as to allow them to penetrate and grow freely; we have measured a carrot drawn in our garden, smooth and straight, which exceeded twenty-six inches in length, yet the soil when first applied to the purposes of a garden was far from being deep or penetrable. Land cannot be considered in good tilth, unless by ploughing the earth it has been mixed with vegetable or animal matter to the depth of 10 or 12 inches; and Judge Powell states, that by manuring and ploughing he has converted shallow unproductive earth into rich fertile soils to the depth of at least fourteen inches.

There is a constant tendency in earths to consolidate, clayey or aluminous ones more than others, which manuring and ploughing will in a great measure prevent; and loosening the soil in all cases allows the roots to sink beyond the reach of drouths, permits them to range freely in search of proper nutriment, and in the same proportion increases the chance for a profitable crop.

Potatoe Bread—Cooked Food.

Considerable has been said in the newspapers on the advantages of mixing potatoe flour, or starch, with that of wheat, for the purpose of making bread in this season of scarcity; but for ourselves we have doubts whether making potatoes into bread is the best method of using this valuable root. That it can be used to a considerable extent as a substitute for wheat flour, is unquestionable; the query is, whether a good potatoe well roasted is not better, or will not afford more nourishment, than if made into bread.

Bread can only be made to advantage of substances in which the fecula or starch is combined with gluten, as in wheat, corn, rye, and in a much less degree barley and oats. In peas, beans, and potatoes, gluten is absent, and the fecula is simply united with a mucilaginous substance; consequently, though belonging to the most nutritive class of substances, they cannot be made into light bread, even though first converted into flour or starch. In making wheat, or corn, into bread, or pudding, a large quantity of water combines with the meal in cooking, adding greatly to its weight, as well as facilitating its conversion into nutriment when taken into the stomach. This power of combination with water is owing to the presence of gluten, of which the potatoe is destitute, and hence adding the flour or fecula of this root to a mixture intended for bread, adds nothing to the weight of the mass when cooked, more than its simple weight. So far as this weight extends, the quantity of bread is increased, but as no one pretends that the quality of the bread is improved by the addition of the potatoe fecula, we imagine the advantage gained will not compensate for the time expended in the preparation, as the same or a greater amount of nourishment is furnished by the root roasted, and of a decidedly better quality, we being the judge.

A number of experiments have been made to ascertain the quantity of water that combines with flour in the formation of bread, or with corn meal when made into pudding. These experiments seem to prove that fifty per cent. of water in weight combines with the flour, or in other words, that ten pounds of flour will make fifteen pounds of bread. Count Rumford has stated, "that for each pound of corn meal employed in making a pudding, we may reckon three pounds nine ounces of pudding." In another experiment by the same individual, "three pounds of Indian meal, three quarters of a pound of molasses, and one ounce of salt, having been mixed with five pints of boiling water, and boiled six hours, produced a pudding which weighed ten pounds one ounce;" showing a gain of six pounds four ounces.

That scientific and able farmer, the Rev. H. Colman of Mass, in recording the history of some of his experiments in fattening pigs, says—"At first we employed half a bushel of Indian meal to make a five pail kettle of hasty pudding; but we soon found that a *peck* of meal, by being boiled sufficiently, would make the same kettle nearly full of hasty pudding, and of sufficient consistence. It was remarkable that the peck of meal produced near the same quantity of pudding that we obtained from the half bushel, which showed the importance of inducing the meal to take up all the water it could be made to absorb." The result of the feeding showed that the gain in nutritive quality was equal to its gain in quantity, or its perfect combination with water.

If the fecula of the potatoe possessed this power of combination with water, a great gain would be made by converting it into bread, but as it does not possess this quality, little is gained by its use, since water without potatoe is cheaper than water with potatoe, for combining with flour for bread. From the above experiments, and from the chemical principles of the case, our opinion is that those who have flour cannot do better than to make it into as good bread as possible, while those who have potatoes will find their advantage in cooking them by themselves, without attempting to convert them into a substance for which nature has not adapted them. These experiments further demonstrate most conclusively the advantage gained from cooking food in general, and corn meal in particular. Mr. Colman's series of experiments showed that the difference in gain between hogs fed with raw meal, and those that had their meal cooked, was full one half in favor of the latter, a result which should induce farmers to look at the matter at least, if attachment to old forms and prejudices is so strong as to prevent the following of such examples of saving and thrift.

Report of the State Geologists.

This very interesting and able document, occupying 212 pages, contains the reports of the four geologists having charge of the four districts into which the state is divided, and the report of Dr. Beck of the mineralogical and chemical department. It also contains brief reports from Dr. Torrey the State Botanist, and from Dr. DeKay the Zoologist.

As it is expected that this examination will occupy several years for its completion, after which a full and final report is to be published, the object of the present report is merely to give a general outline of the geological features of the state, and a statement of those facts which may have an immediate bearing upon economical purposes. There is much, however, even in this, which will be read with great interest by every scientific person, and the useful facts recorded are such as are calculated to inspire the fullest confidence in the utility of the enterprise. The reports of the botanist and zoologist, from the nature of the studies and the lateness of the appointment, are necessarily brief; but we would observe, what will be received with great pleasure by every botanist, that one of the chief objects in view of the former, at the final report, is a full and accurate description of all the plants of the state. From the report of the latter, we copy the following paragraph, where the utility of the study of Zoology is alluded to. After speaking of the absolute necessity of this study to the knowledge of organic relics, and consequently to the study of geology itself, Dr. DeKay says:

"Our comforts, and even our existence, is intimately connected with the class of beings, whose characters and habits we are called upon to investigate. During the past summer, our farmers, more particularly in the northern parts of the state, had occasion to mourn over their blighted harvests, to witness the devastation of their property, occasioned by an apparently insignificant insect, and to regret their ignorance of his peculiar habits, in order

that they might be prepared to suggest some rational remedy for his destruction. The pecuniary loss thus occasioned in this state alone, almost exceeds belief. Nor have our grain crops alone been thus assailed. In many of our most fertile grazing counties, the grass has been nearly destroyed by the combined ravages of vermin and insects. The cultivator of fruit likewise has often witnessed with unavailing regret, his favorite trees either totally destroyed or much retarded in their growth, by insects, whose diminutive size and nocturnal habits, elude his observation. Even in the depths of winter, the enemy has been insidiously at work, and the disappearance of the last snow has revealed the extent of the destruction. It is scarcely necessary to allude to the depredations committed in our gardens, as a subject of daily occurrence; and although the injuries thus incurred may in isolated instances appear to be of small amount, yet the aggregate annual loss can scarcely be appreciated."

The very able report of Dr. Lewis C. Beck, on the mineralogical and chemical department of the survey, consists chiefly of analyses of the principal iron and lead ores of the state. It also contains some very important suggestions relative to the improvements which may be made in the extraction of iron from the ore. It appears that the present mode is attended with a great waste both of fuel and of ore. The magnetic iron ore of the Arnold mine in Clinton county, contains, according to the analysis of Dr. Beck, 72 per cent of metallic iron, consequently it is one of the richest in the world. Yet it appears that by the process now adopted, three tons are required for the production of one ton of maleable iron, showing a loss of more than fifty per cent. in the operation. "The clay iron stone," says Dr. Beck, "so extensively used in Great Britain, seldom contains more than *thirty-five* per cent. of metallic iron, and yet it is stated that three tons of this ore, yield about one ton of cast iron, and this last again loses about ten or twelve per cent of its weight by conversion into refined iron, so that three and a half tons of the ore yield a ton of refined iron." It will thus be perceived that the waste in extraction, in this country, is about double that in Great Britain.

The analyses of the different beds of iron ore in the state show great variations in their purity. In consequence of this difference, it is often found necessary to vary materially the process of extraction. But this can be done understandingly only by the application of scientific knowledge, and from a want of this, many valuable beds have been abandoned. "It is now admitted," says Dr. Beck, "that in order to carry on this branch of art in the most advantageous manner, it is essential that the chemical composition of the ore should be accurately determined, as well as the flux to be used, of the slag or scoria formed during the process, and finally of the iron which is the result. Investigations of this kind have been prosecuted for some years in Sweden, France, Germany, and England, and the result has been the introduction of improvements by means of which the ores have been made to yield a larger quantity or a better quality of iron than was formerly obtained from them." When it is considered that the state affords inexhaustible beds of the purest ore, and that several millions of dollars are annually sent out of the United States for iron, the importance of similar investigations in this country, is at once perceived.

The subject of *lime as manure*, is becoming a subject of constantly increasing interest in agriculture. The following remarks are from Dr. Emmons, geologist of the second or northern district:

"Before closing our remarks on the inferior stratified rocks, we would suggest the expediency of using the coarse disintegrated limestone as manure. This variety of it is as easily ground as plaster, and might be used in the same manner. We have evidence of its utility when thus employed. Mr. Griffin, of Chester, Warren county, a year or two since, used it on his land with as much effect, he thought, as genuine gypsum; indeed he supposed it was gypsum. But there is evidence of its fertilizing properties from other sources. Mr. Moore, of Geneseo, has communicated in the Journal of Science, an account of his experiments with it, and from them it appears equal in fertilizing powers to the best plaster, especially when spread on fields of clover, wheat, and other spring crops. These favorable results were also obtained by many farmers in the neighborhood. The variety used by Mr. Moore, however, contained petrifactions. This fact leads to the inquiry, whether its fertilizing property was not owing to the animal matter in the shells and limestone in which they were imbedded. In the case of Mr. Griffin, we found the limestone, though really primitive, and embraced in primitive rocks, extremely fœtid, and filled with decomposing pyrites.

"The salt formed by pyrites after decomposition, we have conjectured was also beneficial to plants. This idea occurred to us a number of years since, when on a visit to the New Jersey marl pits. There the marl abounds in pyrites, which slowly decomposes and forms a sulphate of iron, which we conceive may and does act on the vegetables, in a way to promote its growth. Leaving this saline matter out of the question, we think there can be but little doubt that all limestones which can be reduced to powder without too much expense, may be profitably employed as a manure. If we were called upon to judge, a priori, of the probable effect of the carbonate and sulphate of lime, we should say there was more probability of the former doing good than the latter, as it is much more soluble. This subject is one of importance to the farming interest, as limestone may be obtained where plaster cannot, without incurring too much expense in transportation."

The powerful fertilizing properties of animal substances, as in horn and bone, have been sufficiently proved; it is not probable however that the very small quantity applied to the land by the use of the shelly limestone just spoken of, would produce much effect, when compared with that of the lime itself in preventing the dissipation of volatile manure, and in forming the insoluble oxalate of lime where sourness exists in soil.

The great importance of calcareous manure, renders it very desirable to be able to ascertain the presence of carbonate of lime, wherever it may exist in a suitable state for application to land. Shell marl possesses the advantage of being already so soft and friable as to need no further pulverization. It is found in many parts of the state, and many new localities doubtless may be discovered. It is commonly found in low grounds, where ponds and lakes have formerly existed or new exist, where shells have been formed in abundance, and constitute by their disintegration and decay, shell marl. Beds of shell marl are generally covered by peat and marsh mud, often several feet in thickness, hence they are to be looked for in such localities, where ponds have once existed, but which have become gradually filled. The presence of marl may be readily determined by thrusting a pole through the mud; on withdrawing it, the marl is recognized as a white slimy mud on the lower part of the pole, more or less concealed by the black mud through which it has been withdrawn. All doubt of its being marl is removed if it is found to effervesce strongly in acids. The marl which exists in large quantities at the Cayuga marshes, and in some other places along the line of the Erie canal, might probably be transported on the canal to other places, to much profit, for agricultural purposes.

The following remarks from Dr. Emmon's report, are appended to a general description of the great rocky strata of the northern part of the state. They serve as a specimen of the reasoning which should guide in geological examinations for valuable minerals.

"In concluding my remarks on the geological sections, we observe that they serve only a general purpose; thus they may be said to furnish the key to the geology of the district, as by them we learn the general formations, and their comparative extent. But what may be called the subordinate formations, such as the deposites of the different ores, as lead, copper, iron, zinc, and the valuable combustibles, as peat and coal, require an examination of the square miles. They serve to make it possible, or rather they furnish evidence to the mind of the geologist, whether those valuable substances are compatible with the general formations, and whether it is expedient to search for them or not. For nature has established unexceptionable laws in the deposites of minerals, and guided by them, we expect to find her rich stores only in certain formations.

"This is so substantiated by modern discoveries, that it will suffice barely to mention the following well known facts. All the coal formations are above the primary rocks; the different kinds of coal belong to distinct geological positions in the strata. Gold in this country appears exclusively to have been deposited on the talcose slate—the species of iron do not occupy the same rock. It is not true, however, that golden sands are always in the debris of talcose slate: or that coal is always to be found in the coal measures of any place; but the kind of rock being known, and its place determined in the series of formations, we are then prepared to say whether it is expedient to search for iron, coal, or any of the valuable metals.

"These remarks are made in consequence of repeated inquiries made of us during the last season, and in fact almost every day, in relation to these points; and we have often been assured, that coal had been found in districts entirely primitive in their character, and so of many other things which would have been equally out of place, had their assertions been true. But it is no unfrequent occurrence in this country, for men to spend small fortunes at least, in search for coal, gold, or silver, when a very limited knowledge of the subject would have saved the useless expense."

The following remarks, on the subject of the existence of coal in Western New York, from the report of T. A. Conrad, of the third district, show, in a single case, the importance of the study of organic relics:

"From the deposition of the first sedimentary rocks, to that of the newest stratum of the district, all the dry land, if there was any, seems to have been confined to the few points presented by naked and barren primary rocks. Admitting that all coal deposites of any extent and value were derived from luxuriant vegetation on land or in fresh water marshes, we perceive that the conditions necessary for the deposition of extensive coal strata, could not have existed in a region where marine formations prevailed, to the exclusion even of small islands, sufficient to nourish even a scanty vegetation. This opinion is confirmed by a comparison of the organic remains contained in strata intimately associated with coal, and those of the upper rocks of our district. The former strata are characterized by fossils of the carboniferous order, but the latter by those of *Silurian* or lower transition rocks."

To the capitalist, who is about to invest large sums in mining operations, the importance of the subject must be felt, and scientific, as well as practical knowledge, is often found to be indispensible to success. A few facts may be adduced in proof. The following are from the report of the second district, by the assistant geologist of that district.

"For some years lime was exported from Britain to New South Wales, where native limestone exists in abundance. This could only have resulted from ignorance of the geological character of the country.

"In Cornwall, until recently, ores of silver and cobalt have been thrown away from a mine which, since the discovery of their value, have yielded more than £10,000 per annum. The tin mines of Cornwall, have been celebrated from the earliest periods of history, but only within the last century have its copper ores been considered of any value, being previously used for mending the roads.

"In Derbyshire, for many centuries, lead has been smelted from the common blue ore, yet the other ores of the same metal were used for mending roads or left in heaps as rubbish; these rejected ores have since been worked to good account, and even the materials of a public road have been converted into metal.

"In North Carolina a gentleman had worked an ore of gold which yielded about $40 per ton; on examination the ore proved to be copper pyrites of good quality, and worth $100 per ton. In another case, an ore of gold which yielded, by amalgamation, little more than $2 per bushel, gave on analysis more than $30 per bushel.

"Many instances might be mentioned of persons, in various parts of the country, who, believing that

their estates contained valuable veins of metallic ores, or beds of coal, have been induced to carry on expensive workings, in many cases, where they could ill afford the means. Excavations have been made to a considerable depth in the solid rock, without the slightest appearance of metal, in belief that the vein lay below, and that it was necessary to remove the superincumbent rock before the ore would be found. In the greater number of such cases, a slight knowledge of geology would have shown that, in all probability, the result would prove unsuccessful. Small masses, or streaks of ore, in a rock, are often sufficient inducements to cause the expenditure of large sums in unsuccessful enterprizes. A gentleman engaged in the manufacture of iron, in this state, observed to me, that had he possessed some knowledge of mineralogy and geology, when he commenced his operations, it would have saved him many thousands of dollars, which he had expended in unsuccessful mining and manufacturing operations, within a few years. One example of this kind ought to suffice for convincing every intelligent person of the value of this kind of knowledge, but hundreds, if necessary, might be mentioned."

Our limits will not permit us to notice many very interesting facts which are presented in these reports, but as the following may be new to most of our readers, as it is of recent discovery, it deserves a brief notice.

The mountains of the northern part of the state have been generally known to possess considerable altitude, but none of them have been supposed to be nearly equal in height to the Catskill range. Whiteface, a peak in the northern part of Essex county, deriving its name from the circumstance of a large portion of the rock on one side having been denuded by a slide, has generally been considered as the highest of these mountains. Its height has heretofore been stated at 2,600 feet, while Round-top of the Catskill, is 3,894, making the latter 1,200 feet higher than the former. Dr. Emmons, suspecting that there was an error in this statement, made accurate barometrical measurements of its height, as well as of the height of several other places of less elevation. The error of the previous statement was proved, for Whiteface was found to be no less than 4,855 feet above the level of the sea, and more than 1,000 feet above the summit of Round-top. But there are several other mountains higher than Whiteface, as is proved by leveling from the summit of the latter, so that some of them cannot be much inferior in height to the White Hills of New Hampshire. "Another fact," says Dr. Emmons, "which goes to show the great height of these mountains, is their Alpine vegetation. The trees are dwarfish, or but few feet high, with stiff rigid branches, on which a person might walk. Among the plants, we observed the Salix herbacea, Empetrum nigrum, Arenaria glabra, Lycopodium selago. The lateness of the season, however, prevented our search for plants, though we were satisfied that its Flora is much the same as that of the White Hills. There is another fact which has the same bearing as the one stated above, viz: that this region is not free from snow three months in the year, and twice in the month of August last, the highest summits were covered with snow. This is spoken of as rather unusual. It is not however the absolute height of a mountain which gives it all its interest. There are often additional circumstances worthy of attention, such as deep gorges and high precipices; and this leads us to speak of a precipice five miles from the Iron Works of Newcomb. It is just at the source of the north branch of the Hudson and Au Sable rivers. The precipice which we measured, and over which we looked, is from one station 1,200 feet high. Taking its height from another station it is 1,000. This precipice extends about a mile, though it does not preserve this great elevation the whole distance.

"This is probably the greatest natural curiosity in the state except the falls of Niagara; it is well worthy a visit by the lovers of magnificent scenery. Even the fragments of rock lying in the notch are wonderful for size; one, which we measured, is 43 feet long and 41 wide, and about 35 high; it is of a quadrangular form, and will weigh about 10,026,931 pounds, or about 5,000 tons, and this is only one among hundreds of the same size."

It is much easier to discover faults than to avoid committing them; yet this consideration should not prevent pointing out errors or defects where it may lead to benefit. In the report of the first district, it is asserted, that "soils, with the exception of those resulting from alluvial depositions, are derived from the disintegration and decomposition of the subjacent materials." No distinction is here made between *alluvial* and *diluvial* formations, the latter of which constitutes a considerable portion of the subsoil of the state, and has generally but a slight relation to the regular strata below. Again, "The decomposition of gravel, pebbles and rock, has been observed to be a benefit to vegetation." This statement is too general; some mineral substances, as limestone, by disintegration, would be beneficial; others, as silicious stones, would exert an imperceptible effect; while others, as magnesian rocks, would cause a positive injury. In the report of the third geological district, we should object, on the score of elegance, to the term "downheave," and to the name "Bastard limestone," adopted in the report; we should also consider the following language as hardly according with the dignity which should characterize a state document. "To those who admire the sombre but sublime scenery of a mountain pass, we would recommend the vicinity of Little Falls. Naked gray rocks, crested with forest trees, are imaged with a beautiful reality in the still waters of the canal, which renders a stroll along its bank, on a lovely summer or mild autumnal evening, a source of heartfelt enjoyment. The Mohawk pours its glittering waters among tabular masses of grey rocks, which like an antique ruin reminds us of by-gone centuries; the mantle of summer foliage is kept ever of the freshest hue by the gentle showers of spray," &c. The following assertion, even if it were true, evinces too little respect for the labors of others who have done much for the geology of the district, though errors have been committed. "What has hitherto been published relative to the geology of the district, with the exception of the judicious observations of Dr. James Eights, published in the Zodiac, has tended more to confuse the ideas of an inquirer, than to impart correct information."

In thus pointing out some defects, we must also be permitted to express our great gratification with the fund of useful and interesting matter contained in this document, and when it is considered that one half of the last season had elapsed before the appointments were made, the proof of the enterprise and scientific skill engaged in this expedition is evident, and the fullest confidence may be reposed in its utility and great ultimate success.

HINTS FOR APRIL.

During the present month, farmers should endeavor as much as possible to get their land into the best condition for planting, for on this will depend in a great measure the success of the crop.

No pains should be spared to apply manure copiously to corn and potatoe crops—the product will abundantly repay the labor. To the smaller grain crops, as for instance, oats and barley, manure should not commonly be applied, as the benefits in such cases may not overbalance the injury.

Wheat, which has been injured by the heaving of the frost, has in some cases been greatly benefited by passing a roller over it, thus pressing the roots again into the earth.

New meadows should be rolled in the spring, to render the surface smooth for mowing.

Plaster, to be beneficial to the greatest extent, should be sown on meadows early in spring.

Green sward, in order to be turned over neatly, should have the furrow slices one half wider than thick.

Seed barley, by being limed and rolled in plaster, has produced crops freer from smut in consequence of this operation, and yielded larger products.

The planting of locust trees for timber should be more attended to. The seeds when sown, should be previously scalded by pouring hot water on them and suffering it to stand several hours—the swollen ones should then be planted, and the others re-scalded.

Stocks of peach and other fruit trees, should now be cut and trimmed. Every bud should be removed except the one intended to grow.

The soil round fruit trees which do not stand in cultivated ground, should be spaded for two or three feet on each side. This is absolutely necessary for young trees.

The roots of peach trees should be examined for the purpose of removing all the worms which may have eaten in the bark, and all the holes which appear should be searched to their termination, that the worm may not escape.

We wish again to urge upon farmers, the great benefit to be derived from the culture of root crops—the amount of cattle food thus obtained is too much overlooked. By good culture, many hundred bushels may be safely calculated on, exceeding many times in value a good crop of hay from the same quantity of land. Drilling, instead of sowing the seed, greatly lessens the labor of hoeing.

Blight in Pear Trees.

The Pennsylvania Horticultural Society, anxious to promote the discovery of a preventive for the disease usually termed *blight* in Pear Trees, offers a premium of FIVE HUNDRED DOLLARS, to be paid the person who shall discover and make public an effectual means of preventing its attack. The premium not to be awarded until after the expiration of three years from the publication of the preventive, nor until the Society shall be fully satisfied of its efficacy. Communications on the subject may be addressed per mail to DAVID LANDRETH, Cor. Sec. Philadelphia.

Verd antique marble in huge blocks, from New Haven, are now being worked in New York. It takes an exquisite polish. There is an American invention for imitating *verd antique*, and all other kinds of colored marble, not merely in hue and polish, but in hardness and durability.

SHEEP.

MR. HOLMES:—In the Maine Farmer of March 14,—No. 5, there is an article headed "*Sheep*," taken from the Woodstock Courier.

The use of Castor oil there recommended for a particular disease, has been found beneficial in other internal diseases.

It is with animals as with man, but particularly with sheep, that irregularly in the bowels is a great cause of disease, and if not early attended to may prove fatal.

A costive habit in winter, is common with sheep, when fed on dry food, and if this is not speedily removed the sheep will droop and die. A daily attention should be paid to a flock of sheep to discover if there is any change from their common appearance, and if any are found with a dull eye, inactive in manner, without appetite or costive, a dose of castor oil should be given immedately. The dose to a grown sheep is a table spoonful, to be repeated in 24 hours if the oil has failed to produce an effect, and if there is much uneasiness, the dose may be repeated in 12 hours, or an injection of warm water with a little suds and molasses. A quarter or half pint of peppermint tea, milk warm, has been usually given with the oil.

Oil has been found useful to lambs that are reared with cow's milk, or to such as have cow's until the ewe has milk to support it. The first milk from an ewe is like the first milk taken from a cow after calving, and produces a lax state of the bowels, and in cases where the ewe is not in milk when the lamb is dropped, common cow's milk is substituted, and produces a costive habit in the lamb. To counteract this a tea-spoonful of oil has been given in the milk once a day, or oftener if needed, until a healthy state of the Lamb is produced. Success has attended this practice.—*Maine Farmer.*

Education is a better safeguard for liberty than a standing army. If we retrench the wages of the schoolmaster, we must raise the wages of the recruiting sergeant.—*Ed. Everett.*

COMMUNICATIONS.

Important Questions in Husbandry should be SETTLED.

No Advantages gained by Cutting up Corn when bitten by a Frost.

There are, in relation to practical husbandry, very many important questions, which remain yet to be settled. Nothing could contribute more successfully to the advancement of the rural arts, than to bring such questions to a satisfactory solution. The questions to which we allude are indeed very numerous. Scarcely any truth, in relation to the practice of agriculture, is so well and so generally ascertained and established, as to command universal belief, and produce uniformity in practice. In regard to almost every thing that comes within the province of agriculture, practical men entertain different opinions. Yet it is an unquestionable truth, in relation to every sort of business under the sun, that there is one *right* way of doing it, and that there is no other way equally good. When two or more farmers differ in their opinions, relative to practicing any specific branch of husbandry, they may indeed all be wrong, but it is certain they cannot all be right.

It is very desirable that the important questions which so frequently arise, in relation to the practice of agriculture, should be settled in a satisfactory manner. Gentlemen of scientific and practical attainments, who delight in rendering themselves useful as the patrons of agricul ture, should, with a single eye, aim at such objects.

Important questions in relation to the advantages of using plaster, the manner of its use, and the manner also of its action, remain yet to be settled. The public mind needs to be further enlightened on these subjects, for it is obvious that farmers do not in general avail themselves, to so great an extent as they might, of the advantages to be derived from the use of this mysterious article. Important questions relative to the best methods of cultivating the wheat crop, the corn crop, and all the other crops connected with the husbandry of the country, also remain yet to be settled. There are also yet to be settled questions of the highest importance, relative to the advantages to be derived from the culture of roots, together with the manner of their culture, and the most profitable uses to which they can be applied. We see already that an immense field lies in view, affording unlimited scope for inquiry, and for investigations relative to the agricultural interests of the country.

To these general remarks, we add two specific questions, selected not only because they are intrinsically important, but because they frequently occur, and no less than any others divide the minds of farmers. 1. If corn, while in a state of imperfect maturity, be bitten and injured by frost, will any thing be gained by cutting it up? 2. Is it profitable, in ordinary cases, to cut up corn at all, or to cut up the stalks while the ears are attached to them? In answer to the first question we shall now offer some remarks, and to the second we may respond at another time.

At the time of the great frost in September, we happened to have a small field of corn which was badly injured by that frost, and what to do with it was to us a perplexing question. Having however a slight impression that something might be gained by cutting it up immediately, we went at it, and cut and put up with our own hands, as much perhaps as grew on the fourth of an acre. But finding that the work was toilsome, and having some misgivings as to what might be the consequences of it, we concluded to discontinue our labors, and abandon the crop to its fortune, whatever it might be.

The results of this experiment were such as fully to sustain the opinions entertained by the old farmer of Waterloo, as reported by the editor of the Farmer, who was present and heard the conversation. See Monthly Farmer, vol. 1, page 165. See also Genesee Farmer, vol. 6. The conversation turned on the question, what should be done with corn that had been stricken with the frost? The old farmer "said that corn would ripen when deprived of its tops by the knife, and why should it not ripen when deprived of its leaves by the frost? But the leaves were not all killed, and the juices were fresh in the stalks. He thought the best management was, to let it alone." We are satisfied that the old farmer gave wise counsel—that his reasoning was logical, and his opinions correct. On subsequently examining the results of our experiment, we were not able to discover that the corn which had been cut up, had, in any respect, the advantage of that which had not been cut. The difference in quality was not indeed very striking, yet there was a difference, and it was decidedly in favor of the uncut corn.

In relation to this experiment we submit the following remarks. 1. Several of the stooks, although put up as well as we knew how to do it, got down and suffered by exposure to the weather. In such cases the corn was badly damaged. 2. No part of the corn that had been cut up, came in so well as that which had not been cut, while some of it was badly injured by exposure to the weather. 3. If any advantages were gained by cutting, they were to be found only in the greater value of the stalks for the use of fodder. Were these sufficient to balance the expense of cutting and putting up, together with considerable loss in damage to the crop? This we doubt. We think, as did the old farmer of Waterloo, that when unripe corn is stricken with frost, the best way to manage it is, to let it alone.

DAN BRADLEY.

Marcellus, Feb. 1837.

Cows.

MR. TUCKER—I like to see in the agricultural journals notices of extraordinary animals, or uncommon products; they serve to stimulate inquiry, and awaken emulation Mr. Bloodgood, of Albany, lately imported a cow from Europe, which yielded 33 quarts of milk per day, being milked at morning, noon and night, and fed with a bushel and a half of brewer's grains daily. This is certainly doing well, but we are inclined to think an equal may be found among the home bred animals of New York, so far as regards the quantity of milk; of the quality a better judgment could have been formed had the butter produced by this milk been stated. From the Duke of Devonshire's experiments, the breed of cows of which Mr. Bloodgood's is a specimen, are noted as milkers of the first quality, and excellent for butter, and we have a right to presume that this cow would not have failed in this respect.

A friend of mine has an old cow of rather a tender constitution, and which was the first year allowed to go farrow, under the impression that it would be advisable to fat her in the fall. She did so well through the summer, however, that it was concluded to give her a chance through the winter; and she is now, the first of March, in better order than she was in October. She is a good milker, though without the least foreign cross, and during the height of the milking season, it was ascertained by actual experiment, made nearly a pound of butter daily. During the months of November, December, and January, there was sold from this cow 58 lbs of butter, besides supplying a small family with cream, milk, &c. Her calf last spring was dropped about the first of April, and before that time arrives she will in the year have produced considerably more than 200 lbs. of butter, though the exact amount cannot be ascertained.

This favorable result is attributed by the owner to the use of ruta baga, with which he commenced feeding her at the rate of half a bushel a day in the month of November, and, with some few intermissions, continued them ever since. His turneps, 250 bushels, were raised on half an acre of land, a very moderate yield, but still he thinks more profitable than any thing else he could have put upon it, as he has entirely fattened one animal upon them, and partially two others, besides having some sixty or seventy bushels in reserve for his stock of ewes, a most important requisite with the man who wishes to raise his lambs without any other aid than the milk of the ewe.

No stronger argument in favor of the culture of the ruta baga can be given than is furnished by such examples of their value, and the farmer can now have no claims to be considered one that understands his business who neglects their use, or does not find a substitute for them in the carrot or field beet. The simple statement of facts like the above, show conclusively that cows, to be profitable, should be well kept, and where good cows and good keeping are combined, there is a double pleasure in the result—fine animals and handsome profits. The butter furnished by my friend's cow has been worth forty dollars, probably twice the value he would a year since have put upon her, without reckoning the benefits of the milk necessary for the family, or that of the skimmed milk for the pigs.

G. M. H.

Onondaga co., March 1, 1837.

Skinless Oats.

MR. TUCKER—Having noticed in some of the advertisements in the Farmer that Skinless Oats are advertised, among other "choice seeds for farmers," I would just mention, that two years ago the past winter, I sent to Rochester and procured two small papers of skinless oats, which were divided among two or three of my neighbors, and sown in drills, which we thought produced a pretty good crop, though I was not pleased to see the straw appear of a brownish cast, and very weak, so much so, that the most of mine lay flat down by the time they were ripe. However, I got about four quarts, which I sowed broadcast on about 48 rods of clean good ground, which produced something less than two bushels, or between six and seven bushels to the acre. They were very much crinkled, with considerable smut, and on the whole I consider them an unprofitable crop, in this vicinity at least.

Egyptian Wheat.

I have lately procured about a pint of what is called Egyptian Wheat, which to appearance bids fairer to be profitable to the farmer; if however the contrary should prove to be the case, I would prefer to have the truth come out, for I think the crying up of useless things tends greatly to prevent the introduction of such as are useful.

Carrots.

I last season tried a small patch of carrots, and so far as my experience goes, I think we can hardly raise a crop that would prove as profitable. I am convinced that the root culture must be immensely beneficial, especially to the dairy and wool growing business, and I intend trying carrots and ruta baga on a larger scale the coming season.

Wintering Colts, Calves, &c.

I can hardly close this without giving the result of my observation and experience on the wintering of colts, calves and sheep. Although much has been said on the management of calves, sheep, &c, still I think the most essential part has not been sufficiently urged—I mean that of cleanliness. I have frequently observed in hard winters, when there has been considerable mortality among sheep and calves, and even colts, and often when good sheds and hay were furnished, but where the sheds were seldom if ever littered, the poor animals in lying down become wet and besmeared with filth, get sickly, and often very many of them die, which I have never known to be the case where they were kept clean and dry, with plenty of litter, although larger numbers have been kept in smaller sheds. My best wishes for the success of your publications, and the interests of agriculture.

ARBA BLODGET.

Burti, Chautauque co., March 15, 1837.

Pea Straw.

Not long since I saw a communication from some brother farmer *out west*, stating that pea straw was entirely worthless. I think his saying thus was in consequence of his never having tested the value of it. Last year I raised a fine crop of the green pea, and was careful to preserve them from storms. I got them into the barn in a good condition, and wintered my sheep on the straw, without grain or roots, and never had my sheep look better than they do this spring. I think there is no straw better worth saving than pea straw, if properly taken care of and preserved from the weather. Let some other person try them and tell us the result.

D.

Profitable Dairy.

The dairy business having become so important a branch in the department of the agriculturist, that I feel it my duty to communicate through the medium of your useful paper the result of one of my dairies, under the management of one of my farmers, a gentleman by the name of John Bush. He had fourteen cows of the common country breed, but a little better on account of being better fed. He raised six calves, which were fed on milk ten weeks.

Made 2342 lbs of first quality of cheese, which sold at $8 per hundred,	$187 36
Made of butter 1591 lbs. the average price 19 cts	302 29
Six calves at $3 a head,	18 00
	$507 65
Ten hogs fed on the skimmed milk and whey, worth say $3 per head,	30 00
	$537 65
Hay and pasture for the 14 cows, at $10 per head,	140 00
Net proceeds,	$397 65
The average per head,	$28 40

Such were the returns from a lot of cows that cost twenty dollars a head.

Mrs. Bush pursued the old fashioned way, by skimming her milk and churning the cream, and our friends in Ithaca preferred her butter to any other brought to that market.

We have tried the method of making butter in winter by heating the milk in the pans after strained, to 130 Fah. thermometer; the quality is a little improved, the quantity more, and the labor of churning is less than one half the time required in the old way.

The washing of butter in cold hard water or soft, when taken from the churn, we think injurious to the quality of it, and takes from it that peculiar flavor which we so highly prize. If you think the above statements will be useful, let them find a place in your Gen. Farmer. LEWIS BEERS.

Skinless Oats.

MR. TUCKER—Your correspondent at Drummondville, U. C. has requested such of your subscribers as have tried the cultivation of the above oats, to give the result of their experiments. During the winter of 1834–35, I procured at Albany a small quantity of the skinless oat raised by Mr. Thorp, and sowed them in the spring on a piece of ground where they could be carefully gathered and kept by themselves. I was on the whole quite pleased with my oats, though I observed that they were much more smutty than the common oat, a fact I considered as accidental. In the spring of 1836 I sowed an acre, the land clean and in good order. The heavy rains that immediately followed had a bad effect on the land, beating it down and rendering the surface hard, and thus materially retarding the growth of the oats, as well as injuring the barley sowed in the same field. The oats still looked very promising until they began to head out, when it could be seen at once that they were mostly smut, and at harvesting it was judged that at least three-fourths of them were good for nothing from this cause. They were put into the barn and remained there till a few weeks since, when an attempt was made to thrash them, but they were so black and the sound kernels were so few, that the threshing as well as the cultivation was abandoned on my farm. I should have thought that brining and liming would have cured the oat of the smut, and perhaps tried them again, had not a neighboring farmer, who purchased his oats at the same time with myself at Albany, limed and brined his last year without producing any beneficial results, as his oats were as smutty as mine. On the whole I do not think the skinless oats promise as well for the interests of the farmer in this region of country as the common, or English oat, whatever they may do in others.

Onondaga co. W. G.

A subscriber at Darby, (Pa.) in a letter just received, says—"I fear the character of the skinless oats will not be elevated much in our vicinity, unless there should be a great change in the produce in succeeding trials, as what I attempted to grow were entirely lost by blasting, and proved abundant in straw but no seed. This has been the case with others the last season, in Pennsylvania."

Destruction of young Fruit Trees by Field Mice.

Great damage has been done in this part of the country to young fruit trees this winter by the mice. We have seen almost whole orchards of young apple trees destroyed by their gnawing the bark around the root. Plums, cherries, peaches and pears, have fared no better. The number of these vermin the past year has been unprecedented, and unless thinned off this spring, we apprehend much damage from them the ensuing season. To prevent their ravages for the future, we would recommend to wash the trees for a foot or two above the ground, with a thick coat of white-wash in the fall. It is said the mice will not attack the bark thus washed. Perhaps a coat of tar or pitch applied with a brush, and sand or ashes dusted on it, would be a good remedy. Treading the snow about the trees is useful, but there is danger of their being gnawed, unless the snow is kept beat down. Young trees that have been gnawed around, we would recommend to cut off and engraft at the root. A vigorous growth would be produced in the graft, and thus the trees would not be entirely lost. W. W. B.

Brooks' Silk Spinner and Twister.

Brooks' Silk Spinner and Twister deserves a further notice at our hands, because we think it ranks among the most useful improvements of the day, and is calculated greatly to facilitate our progress in the silk business. Let it be remembered, that very little instruction is required to qualify a woman to use it; that it is equally adapted to the fabrication of sewing silk, twist, or to a thread of any required fabric, and that it produces all these, as far as we can judge, in a perfect manner. Now the question is, what will it earn, in a silk family, or in a silk neighborhood? For now-a-days *profit* is the great desideratum. In this matter, we shall speak on the authority of the patentee, a very unassuming, intelligent, and, we believe, honest member of the society of Friends, or Quakers. He says it is a moderate day's work to spin and twist half a bushel of cocoons into sewing silk, and that the fair average product of these cocoons would be 175 skeins of sewing silk, worth now, at wholesale price, five cents the skein. The highest price of cocoons is $4 per bushel. Assuming these data, and basing our calculation upon five bushels of cocoons, which a family of girls may easily produce every year, let us see what would be the gain which would accrue to this family in five years, from the use of this machine.

The 25 bushels of cocoons would produce 8,750 skeins silk, worth five cents at wholesale,	$437	50
From which deduct the wages of a woman, 50 days, at 50 cents,	$25 00	
Add cost of machine,	35 00	
And it makes a total of		60 00
And leaves a profit of	$377	50
The highest price at which cocoons sell is $4, which would be, for the 25 bushels,	100	00
	$277	50

Which shows a profit, in buying and using this machine, over selling the cocoons, in the small quantity of 25 bushels, of $277,50. This would require the labor of a woman only ten days in a year, or 50 days in the five years. The remainder of the time, to any extent required, might be as profitably applied, in working up the cocoons of the neighborhood, of the town, or of the county; and the value of the machine would be yet but little impaired by these earnings! Every silk district should have one of Brooks' machines.—*Cult.*

Advantages of Changing Seed Wheat.

Mr. Wm. Cobb, of Gorham, informs us that he sowed 10 or 12 years ago, 7½ bushels of common wheat, and it was so injured by the Hessian fly, that he cut it all up for fodder. At the same time he sowed by the side of it a wine glass full (it being all he could obtain) of the Malaga wheat, and that did well; he has sowed it ever since, with success, until within two years since, which time it has been destroyed by the weevil. Friend Cobb observes, that he shall not give up raising wheat on account of its destruction by this insect, but he shall try lime as recommended for a remedy. We should say to every farmer, do likewise. We have occasionally published articles in which it is shown that a change in seed wheat has been attended with great advantages, and farmers should pay more attention to this subject. In our last we published a notice of Egyptian wheat, as was supposed, taken from a wild goose and raised in the state of New York, which is not liable to smut or the weevil. We will send and get some of that wheat, if a few farmers are disposed to pay the expense and try it. With a little more enterprise and a little expense, farmers may gain much or prevent great losses. There is no subject now presented to the consideration of the farmer of more importance than that of raising wheat, at least enough for his own consumption. Improvements are making by obtaining new kinds of seed wheat, in new methods of culture, in threshing, in destroying the enemies of this valuable grain, &c. &c., and as we have a good soil and climate, we shall doubtless be able to raise our own wheat, and those avaricious speculators who have been growing fat by feeding on the miseries of their fellow men, will have to turn their attention to other business, or they will become as lean as a grasshopper in a drouth.—*Yankee Far.*

Italian and Siberian Spring Wheat.

There seems to be two kinds of spring wheat of great repute in Oneida county, the Italian and Siberian, which we have until now supposed to be identical, and which circumstance led us in our last to denominate the whole Siberian wheat. The kind noticed by Mr. Hathaway, is alledged to have come from Florence, and is called *Italian*. We have received a sample from Dr. Goodsell, of Utica, said to have come from Switzerland, which is denominated the *Siberian*. So that although we supposed that there was but one Dromio, it turns out that we have a Dromio of Ephesus and a Dromio of Syracuse—a new wheat from Siberia and a new wheat from Italy. We have samples of both before us, and find there is a marked difference between the two. The Siberian is the largest berry, and the dullest color. The Italian the smallest and brightest grain.

The character of the Italian wheat has been already given by Mr. Hathaway. That of the Siberian we derive from Dr. Goodsell of Utica. It is prolific, the Doctor's Siberian having given a third greater product than his common spring wheat; and one of his neighbors considers its product double. Mr. Tower, near Deanville, as we are advised by a gentleman from that place, raised 160 bushels on four acres last summer. It makes a heavy return in flour—Dr. Goodsell having obtained 50 lbs. 6 oz. from a bushel—2 lbs. 6 oz. above the standard of good winter wheat. It is believed it will escape the ravages of the grain worm, from the circumstance of its being a late variety—a gentleman from Rensselaerville, who has raised it, assuring us that it ripens very late. Both kinds are in great demand, and have been purchased up at $3 per bushel. Our neighbor Thorburn, the seedsman, has procured a few bushels of the Italian, at an expense of about $4,50, and sells it at $5. We intend to try both kinds.—*Cultivator.*

From the New York Farmer.

General Sketches—Western New York.

NO. III.

I could not pass by Hyde Park, without paying in my own view a tribute of respect to the memory of its late public spirited proprietor, the late Dr. David Hosack, many years distinguished among the eminent citizens of the state, by his generous patronage of all public improvements. His botanical establishment near the city of New York, was at one time a great honor to the state, which purchased it of him at less than half its cost; and which by the neglect of the state was permitted to fall into decay and ruin. He entered upon his agricultural pursuits with extraordinary zeal and liberality; determined to carry his farm to the highest degree of cultivation and improvement of which it was susceptible; and to stock it with the best animals, of the best breeds, which money could procure. His sudden death put an end to these plans fraught with great public utility; and left only the feeling of deep regret and disappointment to mingle with our respect for his private virtues, and his eminent public spirit, usefulness and patriotism. The place has now passed into other hands, who are about availing themselves of its distinguished advantages for manufacturing purposes, and the site of a village.

The neighborhood of Albany, in an agricultural view, affords little to interest, except some few examples, well known to the public, of the triumph of industry and skill, over a soil by nature altogether unpropitious and forbidding. The country over which the rail-road car flies, in its passage from Alto Schenectada, is one of which we could desire nothing more than a bird's-eye view; and has been well denominated by some traveler, "the abomination of desolation." The banks of the Mohawk at Schenectada, stretching out into wide and beautiful intervales, are certainly worthy of a much neater and higher cultivation than they have received, and judging from the most transient view, must be eminently productive in good seasons in Indian corn. In the vicinity of Albany, several instances have come within my knowledge, in which large farmers have been compelled to abandon the cultivation of wheat on account of the ravages of the grain worm; a pest which threatens most seriously the agricultural prosperity of New York.

I was unfortunate in my passage from Schenectada to Utica on the newly opened rail-road, first on account of a severe and continued rain through the afternoon and night; and next, from some imperfection in the engine or its management, by which we were kept eighteen hours on the road, and were compelled to pass all the night in the cars. Here and there, however, we caught a glimpse of the country and some of the beautifully situated and finely cultivated farms on the Mohawk, and obtained most favorable impressions of the condition and capabilities of the soil in the fertile intervales and meadows. The road is laid almost the whole distance on the banks of the river. The German flats near Herkimer, from their celebrity scarcely need remark; and the vicinity of Utica is picturesque, luxuriant and well cultivated.

The canal leaving Utica, passes through Whitesboro; and I have scarcely seen any thing which surpasses this county in beauty and fertility. On the long level from Utica to Syracuse the country is not particularly interesting, as the canal passes through the least settled parts; and the little villages, or rather watering places, which have been planted on the borders of the canal, are any thing rather than agreeable. Of Syracuse, the great Saline of the country, I shall say nothing at present, as I design principally to confine my observations to matters connected with agriculture. The soil in the immediate vicinity of Syracuse or Salina is not fertile, but great efforts are now being made, and large expenditures incurred, to bring by draining and clearing some places into cultivation, which must ultimately be highly productive. The passage to Oswego, and return to Syracuse by canal and river, gave me an opportunity of seeing the land on the banks of the river Seneca; and few parts of the country, which I have ever seen, surpass this in beauty or fertility. The land at present requires no manuring; and the application of plaster which is found in abundance in this neighborhood, and obtained at as low a rate as twelve and a half cents per bushel, has proved signally beneficial. The hydraulic power in this vicinity is immense; and one would think almost inexhaustible. Many families however are emigrating even from this fine country to the far west; so that man never *is* but always *to be* blest.

The passage from Syracuse to Rochester, at least that part of it which is passed by day light, presents nothing interesting. The Montezuma marshes are very extensive, and an intelligent fellow passenger suggests that they might one day be drained; but from appearances its practicability seemed questionable; and in any case, with the present amount of land of the finest description unsubdued and capable of cultivation, the prospect of such a project being undertaken seems extremely remote. The insalubrity of this place may perhaps at some future time induce this rich commonwealth to undertake it. Lyons, a pretty village at which we stopped an hour, presents several beautiful examples of ornamental and productive horticulture, in the article of flowers, grapes, and other fruits.

At Rochester my stay was necessarily short, as my time for reaching Buffalo had been fixed by previous engagement. This town has greatly increased since my visit here in 1825. It is making large and rapid strides in business and commercial prosperity. But a small part of its mighty water power has yet been brought into use; and the fertility of the surrounding country, and the rapid increase of its population, must operate greatly to the continued prosperity of the city. I learned the great appreciation in value of farming lands in this neighborhood; and much regretted that I could not visit Wheatland and some other places in the vicinity, which were represented to me on as competent authority as there is in the state, (Jesse Buel, Esq.) as among the best wheat lands in the country.

At Rochester I took the stage by the Ridge-road to Lockport. This road, well known to all travelers, is made on an extraordinary ridge of land, which appears almost to have been formed by art, rising upon an average about fifteen feet above the level of the land on each side of it; and extending in length more than seventy miles, free from stones, and presenting for the greater part of that distance as fine a road as can be found. It is conjectured to have been formerly the shore of the Lake, which it is supposed has gradually receded; and now lies along it at an average distance of eight miles. To the west of the ridge the land is level as far as I could see; and to the east it has a slight inclination towards the lake. The growth of timber is heavy, and the soil deemed highly favorable for wheat, oats and grass. There is no village of any importance on the whole route; but the country is generally settled, and the farm houses have an aspect of unusual thrift and comfort. The proximity to the canal on the one side, and lake Ontario on the other, gives to this country peculiar facilities of intercourse with the great markets; and this added to the excellence of the soil must presently create here a dense and busy population; at present, however, with this as with many other parts of the country, the cheapness of the rich roil in the west, the increasing facilities of emigration, the rapid advance of property in those western settlements, and added to all the electrical charms of emigration, which make obstacles and difficulties fade away, will operate against an immediate increase. Remarkable indeed as the fact may seem, my own observation shows that no section of the country has within the last two or three years sent out a larger proportion of emigrants to the west than Western New York. Now what is the reason of this?—certainly not that the agricultural advantages of Western New York are not equal to any part of the world. But several other reasons may be assigned. One is that the scene of speculation in the west, especially in Michigan, is nearer to New York than to many other parts of the country; and the facilities of emigration by canal and steamboat, are as great as could be desired. They are therefore more within the moving and attracting waters of the vortex of excitement. In the next place many of the settlers in Western New York, either took their land in its original state, or bought in at a low rate from the first settlers, and being, by the improved condition of their estates, as the general advance of the price of landed property, considerably enriched, they sell and immediately proceed to invest their increased means in the cheap and rich lands of the west; and go out with large and vigorous families, "to cause the wilderness to blossom like the rose." Of the many hundred of settlers whom I met in Michigan, a large proportion of them, there was no difficulity in ascertaining, were from Western New York; and from their manners, clothing and equipments, they showed themselves to be among the most substantial and independent yeomanry of the country.

From Lockport my passage was made in the night to Niagara River. I lost at that time sight of the beautiful lands on the Tonawanda Creek. A prejudice has existed against these lands from their reported unhealthiness, on account of the back-water occasioned by the dam at the village. But there is good reason to believe that this prejudice is unwarrantably strong; and that the clearing of the country, which is rapidly going on, will, as in other cases, obviate these objections, which have, no doubt, operated against its settlement; and when the present violent tide of emigration has in some measure slackened, show the extrordinary advantages and desirableness of their lands. H. C.

February, 1837.

Spring Wheat.

Great care should be taken with regard to the seed from which we attempt to obtain our crops, and particularly of wheat. "One error here may mar our whole system, and render our skill productive of as much evil as good. On poor and worn out land, the evil of sowing impure seed with grain or grass seed would be great; but when the ground is in high order, the crop is more injured; the noxious plants take firmer hold, and are more difficult to be eradicated. It would be better for a farmer to pick over his seed wheat by single handfuls, than to sow cockle, darnel, tares and other vegetable nuisances."

A correspondent gives the following directions for preparing seed wheat: "The only successful course is to prepare the seed about ten days before sowing time. This is done by selecting clean and plump seed, passing it through water in a tub about half a bushel at a time, and washing it and skimming off the matter that floats; then empty it into a basket to drain; then lay it on a clean floor, and rake in two quarts of slacked lime and one quart of plaster to the bushel, and if too dry, sprinkle on water, and continue to stir it till all is covered with the lime and plaster. In this way you may proceed until you have prepared your whole seed. Let it remain in a heap one day, then spread it and move it daily, until it becomes perfectly dry; it is then fit to sow, and you may then sow it if the land should happen to be quite wet."

The same writer observes that "the quantity of wheat to an acre, should be a bushel and twenty quarts. In the process of sowing, you may not be able to apportion your seed exactly to the acre; therefore, when you have sowed and ploughed in the quantity proposed for the acre, you may gather all that remains, with the lime and plaster, and sow it on the whole piece of land, passing across the furrows. This will make it even, and cause a very equal distribution of the seed, which may then be harrowed. After the wheat has come up three or four inches above ground, sow one bushel of plaster to the acre, or house ashes, equivalent, as you please, or leached ashes, increasing the quantity."

A writer in the Maine Farmer of the 28th ult., with the signature B. S., gives the following statement to this subject:

"A gentleman, who for several years has been a successful cultivator of wheat, has pursued the following method. He ploughs the land he intends to be sown with wheat as late in the fall as possible, with the furrows running north and south; so that every part of the surface shall be equally exposed to the sun's rays. In the spring, as soon as the frost is out sufficiently to level the ground, he puts on his team with a stout harrow, and sows his wheat without regard to the earliness of the season. Here let me remark, that I believe spring fosts seldom, if ever, injure grain in the least; but an early frost in the

fall is very liable to, especially if it come while the grain is in the milk.

"I suppose the success of the gentleman alluded to above, to depend principally on his practice of late ploughing any early sowing." * * * *

"The eggs or larvæ of insects are early deposited in the earth, in such cells and with such supplies of nutriment for their *infantile* state as their natures require.—The parent insect does not anticipate, and of course makes no provision for their disturbance or removal.—Late ploughing effectually dislodges a great portion of them from their winter quarters, and exposes them to the sudden changes of weather—the alternate wetting and drying, freezing and thawing, which we inevitably have late in the fall and early in the spring, This exposure is more than they can endure, and the natural consequence is, that they perish in myriads."—*New England Farmer.*

Culture of Rhubarb, or Pie Plant.

As the season is now at hand for sowing and planting this most excellent vegetable, the annexed communication of Mr. Edward Sayers is very opportune. To those who have cultivated it, or partaken of tarts made from it, we need not dwell upon its excellence, but to such as are unacquainted with it, we will remark, that as a material for deserts it is unexcelled by any other plant or fruit that grows. For such purposes many prefer it to the gooseberry, and indeed, when its virtues in a medical point of view are taken into the account, we hold it as a duty for every parent to keep a few roots in his garden, as while it answers for the purpose of preparing one of the most excellent tarts that can be made, its curative powers in the summer complaint of children, and indeed, in all affections of the bowels, either in the young or adult, should commend it to general culture. While tarts compounded from it, serve either to remove or prevent such diseases, those made from other materials exert an injurious influence.—*Balt. Far.*

[*From the American Gardener's Magazine.*]

CULTURE OF THE PIE PLANT, OR RHUBARB.

The pie Rhubarb is one of the best known substitutes for green gooseberry *tarts*, in the early part of the spring, and by many persons is greatly preferred in wholesomeness and flavor. This excellent vegetable has been cultivated in the vicinity of large cities, in most countries, where it has always found a steady demand, as a market vegetable, and in private gardens it is always the first consideration.

CULTURE AND MANAGEMENT.—The rhubarb is of easy culture, and very hardy, which renders it peculiarly adapted to this climate. It may be propagated either by seed or cuttings. The seed may be sown early in the spring, on a west border in drills, eighteen inches apart, and managed in usual way of culture: the plants will be of a sufficient size to remove into a stationary bed, in the month of October, which is the best time for planting rhubarb. The method I have generally followed, and found to answer best, in making new plantations, is, by dividing the old roots and crowns, in such a manner that each set has one or more eyes. These *sets* I plant in nursery rows, two feet apart, and one foot from each other in the rows, in the spring, and remove them into their stationary bed in the fall.

PREPARING AND PLANTING.—The ground intended should be well prepared by manuring and trenching, as the rhubarb requires deep rich soil; this done, the bed may be divided into rows four feet apart each way, and at the angles the soil may be taken out of the depth of eighteen inches, into which may be planted one large root entire, which is to be covered with at least half of a wheelbarrow of well rotted manure, when the surface may be levelled. The after management of rhubarb requires good culture, as manuring, keeping clean, &c. If the Plants are slightly protected, in the fall, with a quantity of manure, they will be benefitted, and will also strengthen their roots.

The routine of planting rhubarb should be every three years, as young plants always produce the most tender stalks or canes. The method I have adopted, is, to take up one-third of my bed every year, by which I always keep up a good succession of young plants.

Yours, EDWARD SAYERS.

COOKERY.

TURNEP TOPS.—Put them into cold water an hour before they are dressed; the more water they are boiled in the better they will look. If boiled in a small quantity of water they will taste bitter; when the water boils, put in a small handful of salt, and then your vegetables; if fresh and young, about twenty minutes' boiling will cook them; drain them through a skimmer. They are perhaps better when boiled with bacon.

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PUFF PASTE.—To a pound and a quarter of sifted flour, rub gently in with the hand half a pound of fresh butter; mix up with half a pint of spring water; knead it well, and set it by for a quarter of an hour; then roll it out thin; lay on it in small pieces, three quarters of a pound more of butter; throw on it a little flour; double it up in folds and roll it out thin three times, and set it by for about a hour in a cold place; roll it of moderate thickness, put on pattepans to bake, with such fruit as you have; lay pieces across the top, of any shape or not, as suits your fancy. In small pans fill up with preserves after they are done; bake of a light brown.

Fruit Trees For Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.

apr 15-tf

Gardner Wanted.

WANTED, a person well qualified as a Gardener. He must understand his business thoroughly. He will be required to manage a Green House—must be industrious and temperate. One who can bring satisfactory recommendations, and comply with the above requisitions, may have a permanent situation by immediately applying to

JOHN A. LAZELL,
apl 15-3t Columbus, Ohio.

A Splendid Farm for Sale.

THAT well known farm formerly owned and occupied by James Graham deceased, situate on the shunpike road between Erie and Waterford, midway distant from either place. The farm contains 212 acres neat measure, 175 of which is cleared and under a high state of cultivation, on which is erected a large and convenient dwelling house, kitchen, wood-house, &c. Two large frame *Barns*, one of which is 90 feet long, and the other 45, a shed for the shelter of cattle, 80 feet long, togther with out-buildings suited for convenience and comfort.

There are also on the premises two large fruit Orchards, with about 250 fruit trees in each, scarce one failing to yield an abundant supply every year of excellent quality of fruit.

This farm is well watered and well adapted to grazing, with a sufficient quantity of arable land for the producing of grain.

More particular information respecting the premises, as well as the terms of sale, can be had by inquiring of Carson Graham, at the office of Riddell & Graham, in Erie, or of William Graham in Beaverdam, one mile from the premises.

WM. GRAHAM.
Erie, Pa March 1, 1837. apr 13 19t

Early Dutton or Buel Corn.

JUST received at the Rochester Seed Store, the celebrated early 12 rowed yellow Corn. This corn is very productive and early, it was raised last season by Mr. Wm. Pitkin of this city, and ripened well.

apr 1 REYNOLDS & BATEHAM.

White Italian Mulberry Seed.

A FEW pounds White Mulberry Seed, warranted of the growth of 1836; for sale at the Rochester Seed Store. As the supply this year is inadequate to the demand, persons wishing to purchase will do well to improve this opportunity.

march 4 REYNOLDS & BATEHAM.

Monroe Horticultural Garden & Nurseries, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.

Agents for the Rochester Seed Store.

OUR distant friends and the public will find a large assortment of Garden, Field and Flower Seeds, which may be relied on as being fresh and genuine, put up and labeled at the Rochester Seed Store, for sale at the following places;

W. & G. BRYANT, Buffalo
G. W. MERCHANT, Lockport
WILLIAMS & DORRANCE, Batavia
GATES, BRADLEY & Co. Le Roy
J. F. WYMAN, Geneseo
J. B. DUNCAN, Canandaigua
BOGARTS & WYNKOOP, Geneva
HOLDEN & VINCENT, Oswego

The above gentlemen are authorised to receive orders and payments for us, for seeds, trees, plants, or any other articles in our line. REYNOLDS & BATEHAM.

march 18

Choice Seeds for Farmers.

NEW French white Sugar Beet, *imported.*
Mangel Wurtzel, or Field Beet.
English purple Top Ruta Baga.
Large Orange Carrot, *for stock.*
White Dutch Clover, perennial Rye Grass, Lucern, Trifoil, Skinless Oats, Broom Corn, &c. &c. For sale at the Rochester Seed Store No. 5 Arcade Hall, by

feb 25 REYNOLDS & BATEHAM.

KEDIE & HOUGHTON, Importers of English Field and Garden Seeds,

beg to apprize the public that they have now for sale the largest importation of the choicest and best varieties of every kind of Garden and Field Seeds ever offered to the public in Western New-York, all of which have been selected from the most eminent growers in the Old Country, (and of the growth of 1836,) which, together with a large assortment of Seeds of American growth, they confidently submit to the public as being unequalled by any ever offered in any part of the United States, and by adhering to a strict determination of offering no other seeds but the vitality of which shall have been tested, they solicit a share of the public patronage.

K. & H. deem it necessary to state, that Mr. Kedie's intimate connection in England with most of the practical and scientific agriculturists, horticulturists and botanists, with whom he has passed all the former part of his life, gives him an advantage in his selection of seeds for the public good, not surpassed by any other establishment in the Union.

No 6 Buffalo-street, west corner store of the Eagle Block.
Catalogues to be had at the store.
The highest price paid in cash for Grass Seed.
Rochester, Feb. 7, 1837. feb 25

Rochester Seed Store—1837.—No. 5 Arcade Hall.

REYNOLDS & BATEHAM having made their arrangements for the season, would inform the public that they are now prepared to execute orders for all kinds of SEEDS, at short notice.

They have just received from one of the most respectable dealers in London, a large supply of English seeds, which were shipped to their order last fall, of the growth of 1836—which, together with their assortment of American growth, renders their present stock the most extensive and complete ever offered in this country. Their experience in the business in this place, and their extensive acquaintance with seed growers and dealers, enables them to obtain the greatest variety of seeds, from the best sources, and on the most favorable terms; as well as to select such as are best adapted to the soil and climate of this country.

Wishing to sustain the reputation of the ROCHESTER SEED STORE, the proprietors are determined to sell only such articles, and at such prices, as will give general satisfaction, and ensure a continuation of the liberal patronage they have hitherto received.

Merchants and others supplied with seeds at wholesale, by weight, or in boxes for retailing, at a liberal discount. Catalogues may be had at the store gratis, or sent by mail if desired. (feb 18) REYNOLDS & BATEHAM.

Morus Multicaulis.

JOSEPH DAVENPORT offers for sale 50,000 plants of the true Chinese Mulberry, or Morus multicaulis. Trees will be carefully packed and forwarded as early as desired. Orders must be sent to Colerain, Mass. till the 15th of March; after which time to Hartford, Ct. All inquiries will be attended to at his plantation, 5 miles south-west of the city. Early orders only will be supplied, as arrangements will be made use all not called for soon.

Colerain, Jan. 23, 1837.

Mulberry Trees, &c.

THE subscriber has for sale 10,000 Mulberry Trees, four years old. Also three million *Silk Worm Eggs*, well preserved through the winter, at 5 cents per 1000 for the whole, or in smaller parcels at 7 cents per 1000. Apply to JOHN LONGLEY, township of Louth, 4 miles west of St. Catharines, U. C. April 1, 1837.—3t*

Silk Culture.

THE Chidsey White Mulberry Plantation in Venice, Cayuga co. can be rented the ensuing season on the most reasonable terms From that plantation, and from Red Mulberry trees in the vicinity, may be made 200 pounds of silk in a season. 400,000 Silk Worm Eggs, one crop species, and 100,000 two crop species, together with apparatus for rearing worms, &c. and Hale's Silk Reel, may be had. The whole offers great encouragment to the Silk culturists. The subscriber has for sale 5000 White Mulberry Trees of two years' growth. AMOS G. BALDWIN.

Aurora, Cayuga county, March 10, 1837 ap 1-3t

From the Cultivator.

Hop Culture.

H. Todd, of Dover, Del. having inquired of us in relation to the culture of hops, we have asked and obtained from the Hon. S. Cheever, the following answers to the queries propounded. We only add, that the sets may be obtained from Judge Cheever, if application is made early.

Judge Buel—Mr. Todd's note to you, inquiring in relation to the cultivation of hops, is before me. He inquires,

1. What kind of soil is best suited to their cultivation?

2. How are a large number of plants to be obtained?

3. What is a fair average price in our market?

4. What the mode of cultivation in those countries where the cultivation has been most successful? with any other useful information upon the subject.

I have been in the cultivation of hops for the last ten years, upon alluvial soil, which I consider well suited to their growth; but I am not certain that the fogs which prevail in the neighborhood of rivers and smallers streams, do not injure them as they approach maturity.

1. Ans. Any good land with loose subsoil which will produce Indian corn or wheat, will, with proper cultivation, produce hops. The less exposed to violent winds the better, as they are liable, when near maturity, to be bruised, and the branches broke off, from high winds.

2. Ans. The sets or plants are obtained from fields in cultivation, by removing the head of the root and upper branches which form near the top of the ground.

The English set only the head of the root, which is larger and of course has more vegetable strength, and produces a more vigorous plant. The cultivators in this country have been less scrupulous, and use both the head of the main roots, and also the branches or runners, to set.

These sets are obtained without much expense, and a field at the spring dressing will furnish sets for a new field of about the same size.

3. Ans. The price in our market has varied from five cents to fifty in the last eight years. In 1827 the price was very fair, from twenty to twenty-two cents per pound. They then fell down to ten cents, and lower, and remained very low until after the cholera prevailed in France, in 1831 and 1832, when an order was issued by the French minister of war, directing rations to be issued to the army in beer, instead of wine—the effect of which was, to raise the price of hops again in this country to 20 cents, at which they stood for two years, 1833 and 1834. They then declined to 12, to 14 cents, in 1835, and in 1836 down to 6, to 10 cents per pound, at which the last crop was sold. France and Germany now grow them in quantities nearly sufficient to supply their own demand, and there is no probability that the price will again advance here, until the quantity is reduced, either by reducing the fields of cultivation or by a failure of crop. The quantity produced in this country now by a good crop, is about two-fifths more than the home consumption; and as there is no prospect of a steady demand for exportation, whoever cultivates hops in this country hereafter, must expect to do it at a loss, unless some unforseen change should occur in the market.

4. Ans. The ground should be prepared in the spring, in a manner similar to preparation for a corn crop, and marked out in rows each way, by a line or otherwise, 8 feet apart, and set with or without manure in the hill. The sets, which should be cut about 4 to 6 inches, may be laid down horizontally, say 2 or 3 inches apart, or set in perpendicularly, by making a small hole in the ground with a sharp stick, then forcing the earth around them, putting 3 to 5 in a hill, in proportion to their size and apparent soundness and strength.

The field may be planted with corn between the rows the first year, as the hops require no pole, nor do they produce any crop. They require poling the second spring, with poles from 20 to 28 feet long, according to the strength of the hill, two and three poles to the hill. As soon as the vine is of sufficient length, it is coiled around the pole, and tied with a rush or blade of coarse grass, putting two and sometimes three vines to each pole, and the other vines pulled out, that the whole strength of the root may pass into the vines on the poles.

The ground is ploughed between the rows and kept clear of weeds, as in a corn crop. The third spring, and every spring after, the hill, which should be formed around them in the summer dressing, is reduced to the level with the ground, or a little lower, and the upper branches and head of the main roots laid open, and cut off with a knife, to prevent their spreading beyong the hill.

The crop is usually matured by about the fifth of September. The vine is cut near the ground, the pole taken down, and the hops picked by hand into a bier, and then taken to the drying house and dried upon a kiln, and after laying a few days after coming from the kiln, are pressed and secured in canvass, and are ready for market.

The expense of cultivating an acre of hops and fitting them for market, is from fifty to eighty dollars, including the decay of the poles. The expense of a drying house, with suitable kilns for drying eight to ten acres, with cooling room and press for packing them, will be from $300 to $800.

There are many details to be observed in the cultivation and curing of hops, which would require too long an article to give.

I remark generally, that the crop is a very uncertain one, and the market more fickle than that of any other article of agricultural production. With a good crop and a good market, it is a good business; but without both, it is not as profitable as an ordinary grain or hay crop. S. Cheever.

From Blackwood's Magazine for February.

THE WINTER IN ENGLAND.

During the last two months, we have had the severest weather experienced in England since 1814. The whole year had been rough, wet, and uncertain. A state of things which the towns and bathing places on the sea coast felt heavily in their finance, for they were nearly deserted by the landowners, who felt no great satisfaction in traveling fifty or a hundred miles to face premature winter, in the little hovels for which the conscience of the landlords of Brighton, Worthing, and the other summer camps of citizenship, charge so rapaciously. But on the 9th of November, the war of elements began. The storm swept the whole coast of England and the western shores of the continent; the sea was covered with recks, and the shore with corpses. But it was on the 20th of the same month that the most tremendous tempest swept up from the Atlantic, and moving northeast, devastated all within its vast expanse, upprobably to the pole. The wind raged for the three days with fearful fury, houses were blown down, mail coaches hurried away, wagons overturned by the force of the blast, and thongh these may seem trival instances of its mischief, they give an extraordinary conception of the power of the wind. The loss of shipping and life was deplorable. The year closed with the great snow storm. A slight fall on the night of the 24th of December seemed only to attire Christmas in his ancient robe, and the sight of the snow was almost welcomed.

But on Christmas night down came the whole weight of the vast fall. Before daybreak, the entire face of England was a bed of snow. All the mails, and conveyances of every kind, were stopped at once, as the snow had drifted in some places, from ten to twenty feet. The few carriges which ventured out were buried in the drifts, and were either left where they had sunk, or, with infinite difficulty, were dragged back to the towns from which they had travelled. This state of things continued for nearly a week. The single night's fall had the effect of impeding almost the entire machinery of commerce and public communication. Great efforts were made to clear the roads; and peasantry were put in motion by hundreds or thousands, but the task frequently baffled them, and some of the mails were four days due. The snow was so deep on the Kent road, that all intercourse was suspended until nearly the close of the week, though the pioneers of Woolwich and Chatham were sent by steamboats to Dover. This sudden stoppage of all intercourse produced great inconvenience, if not great evil, in the commercial world. Remittances delayed shook the credit of the merchant, and perhaps another night's fall of snow would have been little short of striking a blow at the commercial credit of the nation.

But from what source did this incalculable fall come? What mighty agency could have at a moment commaned the mass that covered the sixty thousand square miles of England; covered the whole north of France, Holland, and Germany, in a few hours? The millions of tons must have been beyond all count. And yet the operation was as sudden as it was powerful. No symptom of it was given in the hue, the chill, or the tumult of the air. Perhaps no act of nature gives so high a conception of a more than mortal hand. The rapidity of its effect, the immensity of its product, the subtle but resistless chemistry by which the impalpable elements was turned into a material of a totally different form and qualities, and the material fabricated in a quantity sufficient to sheet millions of miles, are contemplations made to elevate our minds beyond the world.

But, combined with these conceptions, there is one which most painfully brings us to the world again. On the 24th the battle raged round Bilboa. While the majesty of nature was covering the land with its high evidence of power, man was slaying and being slain; thousands and tens of thousands of the same soil, kindred, and tongue, were slaughtering each other from sunset to sunrise. When Christmas morning, the day of peace, came, it was to wretched Spain a day of havoc; thousands were staining the snows with their blood, exposed through the storm to all the tortures of freezing wind, shelterless, naked, stiffening in their gore, and dying in agonies.

Remember This.

Unfermented vegetable and animal matters, including green sward, green crops and long manure, after being buried by the plough, should never be exposed to the sun and winds by cross ploughing, until they have become perfectly rotten. The gaseous matters which dung gives off while undergoing fermentation, always rise, because they are lighter than atmospheric air. They enrich the soil and afford food for plants, because they have already formed a necessary part of plants. Hence, if fermentation takes place *on* the surface, these gaseous matters are scattered and lost; if *in* the soil, the earths and moisture retain them there, and the plants feed upon them.—*Cult.*

Smoky Chimneys.—It has been clearly demonstrated by science and practical experiment, that this great drawback upon domestic comfort, is remedied by an unerring and simple process, viz: a slight but continued enlargement, commencing at the bottom of the flue, and extending to the top. This is sure to produce a draft, and it is presumed that in most instances of defective chimneys, an inattention to this simple rule, in the original construction, would be found the cause of the evil.—*Niagara Democrat.*

☞ A calculating contemporary says that Rice is always one of the cheapest articles of food, and now it is no higher than usual, notwithstanding flour is nearly double its common price. Nothing is so cheap in the present state of prices as rice, and nothing is more healthy or more palatable.

Shade trees.—It is to be hoped that the good taste manifested for a few years past in planting trees along the streets and around the dwellings of our citizens, will be manifested to a still greater extent this spring. Those who design to embellish their premises or neighborhood in this way, should make arrangements soon, as the season for transplanting is near at hand. There are now several good nurseries in and about Rochester, from which a great variety of trees and shrubbery may be had.

A hog is exhibiting in Cincinnati, which is four feet two and a half inches high, measuring eight feet three and a fourth inches, round the waist; nine feet and three fourth inches from snout to tail; (the latter is very short and curls!) and weighs 1500 pounds.

William Atkinson, *Land Agent,* 17 Exchange-street, Rochester. ☞ Farms for sale.
march 4 6m